



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/672,143

09/25/2003

Robert G. McHugh

8071

25859

7590

06/30/2005

WEI TE CHUNG  
FOXCONN INTERNATIONAL, INC.  
1650 MEMOREX DRIVE  
SANTA CLARA, CA 95050

EXAMINER

BUI, HUNG S

ART UNIT

PAPER NUMBER

2841

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

ETC

**Office Action Summary****Application No.**

10/672,143

**Applicant(s)**

MCHUGH ET AL.

**Examiner**

Hung S. Bui

**Art Unit**

2841

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>09/25/03</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show "the receiving channel extends horizontally through one of the sidewalls" as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chrsitensen et al. [US 4,422,703] in view of Eckert [US 5,630,735].

Regarding claims 1 and 5, Chrsitensen et al. disclose an IC socket for electrically connecting an integrated circuit module to a printed circuit board (figure 1) comprising: an insulative housing (30) defining two pairs of sidewalls (36, 38, 40, 42), the sidewalls forming a recessed area defining a plurality of passageways (68) therein; a plurality of conductive contacts received in corresponding passageways (figure 1); and a bolt assembled (82, 84) with the housing therein.

Christensen et al. disclose the instant claimed invention except for the at least one sidewalls of the housing forms a receiving channel and a fastening channel communicating with the receiving channel, the bolt is screwed in the fastening channel.

Eckert discloses a connector assembly (figures 1-2) forming at least one receiving channel (8) and a fastening channel (14) communicating with the receiving channel, at least one bolts (16) is screwed in the fastening channel.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the connection mechanism design of Eckert on the at

Art Unit: 2841

least one sidewalls of Christensen et al., for the purpose of facilitating the device thereon the sidewalls.

Regarding claims 2 and 6, Christensen et al. disclose the instant invention except for the receiving channel being substantially parallel to an upper surface of the recessed area, and the fastening channel being substantially perpendicular to the upper surface.

Eckert further discloses the receiving channel being substantially parallel to an upper surface of the recessed area, and the fastening channel being substantially perpendicular to the upper surface (figure 1).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use specific arrangement of the receiving channel and the fastening channel with the surface of the recessed area in the housing of Christensen et al., as modified by Eckert, for the purpose of enabling the device to be inserted into the sidewalls of the housing.

Regarding claims 3-4 and 7-8, Christensen et al. disclose the instant invention except for a metal sleeve being inserted in the fastening channel, the sleeve is provided with whorls thereon.

Eckert discloses a metal sleeve (16, column 2, line 7) being inserted in the fastening channel, the sleeve is provided with whorls thereon for fastening (figure 1).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use metal for the fastening sleeve of Christensen et al., as suggested by Eckert, for the purpose of providing additional strength for the connection of the additional device.

4. Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chrsitensen et al. [US 4,422,703] in view of Eckert [US 5,630,735] and Johnson et al. [US 6,744,269].

Regarding claims 9-11 and 13-14, Chrsitensen et al. disclose an IC socket for electrically connecting an integrated circuit module to a printed circuit board (figure 1) comprising: an insulative housing (30) defining plurality of sidewalls (36, 38, 40, 42), the sidewalls forming a recessed area defining a plurality of passageways (68) therein; a plurality of conductive contacts received in corresponding passageways (figure 1); and a bolt assembled (82, 84) with the housing therein.

Christensen et al. disclose the instant claimed invention except for the at least one sidewalls of the housing forms a receiving channel and a fastening channel communicating with the receiving channel, the bolt is screwed in the fastening channel and a detecting device received in the receiving channel with a wire connected an external device located in the exterior.

Eckert discloses a connector assembly (figures 1-2) forming at least one receiving channel (8) and a fastening channel (14) communicating with the receiving channel, at least one bolts (16) is screwed in the fastening channel.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the connection mechanism design of Eckert on the at least one of the sidewalls of Christensen et al., for the purpose of enabling attachment of the device to the at least one sidewalls.

Art Unit: 2841

Johnson et al. disclose an IC socket (figure 3) having an insulative housing (30), wherein the housing has at least one receiving channel to be received at least one thermal sensor/detecting device (44, column 3, line 58-column 4, line 10) with a wire therewith.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have a detecting device instead of the wire of Eckert for the sidewalls of the housing of Christensen et al., as suggested by Johnson et al., for the purpose of dissipating heat from the socket.

Regarding claim 12, Christensen et al., as modified, disclose the instant invention except for the receiving channel extends horizontally through one of the sidewalls.

Eckert disclose a receiving channel (8) being through the sidewalls.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have a through hole of the sidewalls of the housing of Christensen et al., as modified, as suggested by Eckert, for the purpose of enabling the detecting device to be inserted in the sidewall socket.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Matsuoka [US 5,573,418] discloses a pressin connection type structure for electric part; and

Art Unit: 2841

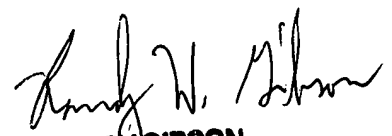
- Ho [US 6,607,396] discloses an IC socket.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S. Bui whose telephone number is (571) 272-2102. The examiner can normally be reached on Monday-Friday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/21/05  
Hung Bui  
Art unit 2841

  
**RANDY GIBSON**  
**PRIMARY EXAMINER**